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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/597,326	06/19/2000	Jerry C. Anderson	SCF-58	4039

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EXAMINER

RUDDOCK, ULA CORINNA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 03/26/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/597,326

Applicant(s)

ANDERSON, JERRY C.

Examiner

Ula C Ruddock

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 13 January 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-24 and 34-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-24 and 34-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Appropriate correction is required. The Examiner has carefully considered Applicant's response filed January 13, 2003.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1-7, 9-18, 20-24, and 34-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Botsolas (US 4,054,710) in view of Heinrich et al. (US 3,991,549). Botsolas discloses a laminated insulation blanket (abstract). The insulating material can be constructed essentially of inorganic fibers, such as glass fibers (col 3, ln 3-11). The insulating material is bonded to a polyester resin film (col 2, ln 57-60). The film also exhibits low permeability for water vapor (col 4, ln 5-18). A reinforcing layer of open mesh scrim cloth composed of polyethylene terephthalate fibers (i.e. polyester) is also present in the laminate (col 2, ln 15 and col 5, ln 16-17). Botsolas discloses the claimed invention except for the teaching that there further comprises a second barrier layer adjacent to the insulation layer. Botsolas also fails to disclose that the yarns of the scrim are flame-retardant, textured yarns having a denier from about 70 to 1200, that the basis weight of the scrim is less than about 1 ounce per square yard, more specifically between 0.25 to about 0.45 ounces per square yard, the blanket thickness, and that these yarns are formed by false-twist texturizing.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have placed a second polyester film having a reinforcing scrim attached thereto on

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the other side of the insulating material of Botsolas, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. In the present invention, one would have been motivated to do so in order to create a blanket with increased insulating properties.

Heinrich et al. (US 3,991,549) disclose a filament yarns that undergo false twist texturizing (col 1, ln 502-53) wherein the filament yarns can be polyesters (col 4, ln 35-36). The flame resistance may be increased by using yarn components which are flame-proof or flame-retarding (col 3, ln 42-44). The filament yarns have a dtex of 67, i.e. 60.3 denier (col 6, ln 1-3). It should be noted that the Examiner is equating the polyester texturized yarns of Heinrich et al. to the textured yarns of the present invention. It would have been obvious to have used the flame-retardant polyester yarns of Heinrich et al. in the insulating blanket of Botsolas, motivated by the desire to obtain a composite insulation with increased flame retardance and additional durability.

In addition, the combination of Botsolas and Heinrich et al. fail to disclose that the yarns of the scrim have a denier of from about 70-1200, that the scrim has a basis weight of less than about 1 ounce per square yard, or more specifically .25 to about .45 ounces per square yard or that the blanket has a thickness between about 1 to about 4 inches. It should be noted that increasing the yarn denier and the basis weight of the scrim and the blanket thickness are result effect variables. For example, the larger the yarn denier and the greater the basis weight is directly affects the strength and durability of the scrim. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the yarns of the scrim have a denier of from about 70 to 1200, the scrim have a basis weight of less than 1 ounce per square yard, or more

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specifically .25 to about .45 ounces per square yard, or to have made the blanket have a thickness between about 1 to about 4 inches, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized the scrim denier, the basis weight of the scrim and the thickness of the blanket, motivated by the desire to obtain an insulating blanket with increased durability and strength.

4. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Botsolas (US 4,054,710) and Heinrich et al. (US 3,991,549), as applied to claims 1-7, 9-18, and 20-24 above, and further in view of Geiger (US 4,452,848). Botsolas and Heinrich disclose the claimed invention but fail to teach that the scrim has a leno weave.

Geiger disclose a composite roof membrane comprising an interior vapor barrier formed of a scrim reinforced film material (abstract). The scrim may be a complex leno weave (col 2, ln 20-22). The scrim can be made of polyester yarns (claim 4). It would have been obvious to have employed Geiger's leno weaving process on the scrim of Botsolas and Heinrich et al., motivated by the desire to obtain a scrim with increased strength and firmness.

Response to Arguments

5. Applicant's arguments filed January 13, 2003, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that Botsolas fails to disclose that the yarns of the scrim are generally flame retardant and textured. While this argument may be true, the Botsolas reference has been modified by the Heinrich et al. reference which does disclose yarns

that are generally flame retardant and textured. Applicant also argues that there would have been no motivation to substitute the yarns of Heinrich et al. for the yarns of Botsolas. This argument is not persuasive because Heinrich et al. disclose that false twist texturizing leads to a reduced flex abrasion resistance, and thus a good linear strength (col 2, ln 52-54). Therefore, a motivation to use Heinrich's texturized yarns in the scrim of Botsolas exists would be to create a scrim having good linear strength. Applicant also argues that there is no motivation to sandwich the insulation between two barrier layers. This argument is not persuasive because it is the Examiner's position that the rationale to modify or combine the prior art does not have to be expressly stated in the prior art. The rationale may be reasoned from knowledge generally available to one of ordinary skill in the art. *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed.

Cir. 1988)). It is well known in the composite industry that fibers sandwiched between two film layers would inherently increase the surface area of the yarn, thereby, enhancing bonding and making the composite stronger. Applicant also argues that the Geiger reference fails to overcome the deficiencies of the independent claims. This argument is not persuasive because as shown above, the Botsolas and Heinrich et al. reference disclose the claimed invention except for the teaching that the scrim has a leno weave. The Geiger reference has only been used to reject the claims requiring a leno weave.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C Ruddock whose telephone number is 703-305-0066. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Ula Ruddock

UCR *UCR*
March 24, 2003